CLAIMS

What is claimed is:

1.   A system comprising:

a communication adapter coupled to a transmission medium to transmit and receive data according to a network protocol;

a data bus coupled to one or more storage nodes, each storage node comprising storage resources and logic to transmit data to or receive data from a storage medium according to an input/output format; and

a processing system to host a common transport agent, the common transport agent comprising a first interface comprising one or more method interfaces to communicate with each storage node independently of the input/output format of the storage node.

2.   The system of claim 1, wherein the processing system further comprises a unit management agent to discover the storage resources of the storage nodes and post an indication of the discovered storage resources to the network.

3.   The system of claim 2, wherein the unit management agent comprises logic to establish a connection between a client on the network and a storage node in response to a connection request from the client.

4.   The system of claim 1, wherein the system further comprises a plurality of storage nodes coupled to the data bus.

5.   The system of claim 4, wherein each of the storage nodes comprises:

an input/output controller coupled to a storage medium to store data in or retrieve data from the storage medium according to an input/output format; and

a processing system to host:

a device driver module to communicate with the input/output controller according to the input/output format; and

a remote transport agent to communicate with the first interface of the common transport agent independently of the input/output format.

6. The system of claim 4, wherein each of the storage nodes is coupled to a redundant array of independent disks through an input/output channel.

7. The system of claim 6, wherein the input/output channel comprises one of a small computer system interface and serial ATA adapter.

8. The system of claim 1, wherein the network protocol comprises a network protocol selected from one of Infiniband and TCP/IP.

9. The system of claim 1, wherein the common transport agent further comprises a second interface comprising one or more method interfaces to communicate with the network adapter, the one or more method interfaces of the second interface being independent of the network protocol.

10. A method comprising:
discovering storage resources of one or more storage nodes coupled to a data bus, each storage node comprising logic to transmit data to or receive data from a storage medium according to an input/output format;
advertising the discovered storage resources to a network according to a network protocol; and
providing access to the storage resources from the network through a first interface to each storage node, the first interface comprising one or more method interfaces which are independent of the input/output format of each storage node.

11. The method of claim 10, wherein the method further comprises providing the discovered storage resources to the network through a second interface, the second interface comprising one or more method interfaces which are independent of the network protocol.

12. The method of claim 10, wherein the method further comprises:
receiving a request from a client on the network for storage resources; and
establishing a connection between the client and one or more storage nodes to provide storage services.

13.   The method of claim 12, wherein the method further comprises forwarding a remote direct memory access command from the client to a storage node providing at least some of the requested storage resources.

14.   An article comprising:

A storage medium comprising machine-readable instructions stored thereon to:

discover storage resources of one or more storage nodes coupled to a data bus, each storage node comprising logic to transmit data to or receive data from a storage medium according to an input/output format;

advertise the discovered storage resources to a network according to a network protocol; and

provide access to the storage resources from the network through a first interface to each storage node, the first interface comprising one or more method interfaces which are independent of the input/output format of each storage node.

15.   The article of claim 14, wherein the storage medium further comprises machine-readable instructions stored thereon to provide the discovered storage resources to the network through a second interface comprising one or more method interfaces which are independent of the network protocol.

16.   The article of claim 14, wherein the storage medium further comprises machine-readable instructions stored thereon to:

receive a request from a client on the network for one or more of the discovered storage resources; and

establish communication between the client and one or more storage nodes to provide storage services.

17.   The article of claim 16, wherein the storage medium further comprises machine-readable instructions stored thereon to forward a remote direct memory access command from the client to a storage node providing at least some of the storage services.

18.   A storage node comprising:

an I/O controller to store data in and retrieve data from a storage medium according to an I/O format; and

a processing system comprising:

a device driver module to transmit data to and receive data from the I/O controller according to the I/O format; and

a remote transport agent coupled to the device driver, the remote transport agent comprising an interface to receive commands to store data in or retrieve data from the storage medium, the commands being defined in the interface by one or more method interfaces which are independent of the I/O format.

19.   The storage node of claim 18, wherein the remote transport agent comprises a second interface to receive requests to establish connections between clients and storage resources.

20.   The storage node of claim 18, wherein the I/O format comprises an I/O format defined according to one of a version of SCSI and a version of ATA.

21.   The storage node of claim 18, wherein the storage node is coupled to a data bus and the interface comprises one or more method interfaces which are responsive to bus transactions received on the data bus.

22.   The storage node of claim 21, wherein the interface comprises one or more method interfaces to initiate bus transactions on the data bus.

23.   The storage node of claim 18, wherein the processing system comprises a memory and the interface comprises one or more method interfaces to initiate remote direct memory access transactions to transfer data between buffers in the memory and the storage medium.

24. The storage node of claim 18, wherein the storage node further comprises a communication adapter coupled to a network to communicate with clients requesting storage services according to a network protocol.

25. The storage node of claim 24, wherein the processing system further comprises a common transport agent, the common transport agent comprising:

a first interface comprising one or more method interfaces to communicate with the remote transport agent independently of the input/output format; and

a second interface comprising one or more method interfaces to communicate with the clients independently of the network protocol.

26. The storage node of claim 18, wherein the processing system further comprises a unit management agent to discover the storage resources of one or more storage nodes and post an indication of the discovered storage resources to the network.

27. The storage node of claim 24, wherein the network protocol comprises a network protocol selected from one of Infiniband and TCP/IP.